

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph spanning pages 1 and 2 with the following:

D In the conventional semiconductor device as described above, if a negative bias voltage is applied to the cell plate electrode, electrons in titanium nitride film 105 being the cell plate electrode are introduced into tantalum oxide film 104 being the capacitor dielectric film, whereby a leakage current is generated. This introduction of electrons from the cell plate electrode to the capacitor dielectric film causing the leakage current occurs when energy needed for electrons to exceed a potential barrier, which is determined by a work function of titanium nitride film 105 forming the cell plate electrode, is provided to the electrons within titanium nitride film 105. The fact that the leakage current is generated when the titanium nitride film, the work function of which is 4.95eV , is used as the electrode means that a material having a work function that is greater than 4.95eV needs to be used to form the electrode.

Please replace the first full paragraph on page 11 with the following:

D2 In the semiconductor device according to the present embodiment, the storage electrode and the cell plate electrode are formed using tantalum nitride films 3a and 5a, the work function of which is 5.41eV . That is, the semiconductor device according to the present embodiment uses, for formation of the electrodes of the capacitor, a material with a work function that is greater than the 4.95eV of titanium nitride film 105 which was used for the electrodes of the capacitor in the conventional semiconductor device. Introduction of electrons into tantalum oxide film 4 forming the capacitor dielectric film is thus restricted. As a result, generation of a leakage current in the capacitor dielectric film is suppressed.

Please replace the paragraph spanning pages 12 and 13 with the following:

D³

In the manufacturing method of the semiconductor device according to the present embodiment, the storage electrode and the cell plate electrode are formed using tantalum nitride films 30a and 50a, the work function of which is 5.41eV. In other words, according to the manufacturing method of the semiconductor device of the present embodiment, the electrodes of the capacitor are formed using a material of which work function is greater than the 4.95eV work function of titanium nitride film 105.